

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sub	Substitute for form 1449A/B/PTO			Complete If Known		
000	30000 101 101111 1 1 1 1 1 1 1			Application Number	10/616,082	
IN	IFORMATIO	ON DIS	CLOSURE	Filing Date	July 8, 2003	
S	TATEMENT	T BY A	PPLICANT	First Named Inventor	Stephen Hamilton	
	.,			Art Unit	1636	
	(Use as many	sheets as	necessary)	Examiner Name	Not yet assigned	
Sheet	1	of	12	Attorney Docket Number	GFI/107 CIP	

			U.S. PA	TENT DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-OD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
MKJ	AA	4,414,329	11-08-1983	Wegner	
	AB	4,617,274	10-14-1986		
	AC	4,683,293	07-28-1987		
	AD	4,775,622	10-04-1988	Hitzeman et al.	
	AE	4,808,537		Stroman et al.	
	AF	4,812,405	03-14-1989	Lair et al.	
	AG	4,818,700	04-04-1989	Cregg et al.	
	AH	4,837,148	06-06-1989	Cregg	
	AI	4,855,231		Stroman et al.	
	AJ	4,857,467		Sreekrishna et al.	
	AK	4.879,231	11-07-1989	Stroman et al.	
	AL	4,882,279	11-21-1989	Cregg	
	AM	4,885,242	12-05-1989		
	AN	4,925,796	05-15-1990		
	AO	4,929,555	05-29-1990		
	AP	4,935,349		McKnight et al.	
	AQ	5,002,876		Sreekrishna et al.	
	AR	5.004.688	04-02-1991		
	AS	5,032,516	07-16-1991		
	AT	5,032,519		Paulson et al.	**
_	AU	5,047,335		Paulson et al.	
	AV	5,122,465	06-16-1992		
	AW	5,135,854		MacKay et al.	"
	AX	5,166,329	11-24-1992		-
	AY	5,324,663	06-28-1994		
	AZ	5,595,900	01-21-1997		
	AA1	5,602,003	02-11-1997		
		5,707,828		Sreekrishna et al.	
		5,766,910		Fukuda et al.	
		5,834,251	11-10-1998		
		5,849,904	12-15-1998		
		5,854,018		Hitzemane et al.	
		5,861,293	01-19-1999		
	AH1	5,910,570		Elhammer et al.	
	Al1	5,945,314	08-31-1999		
	AJ1	5,945,322	08-31-1999		
	AK1	5,955,347	09-21-1999		
		5,955,422	09-21-1999		
		5,962,294		Paulson et al.	
		6,017,743	01-25-2000		
717		6,096,512		Elhammer et al.	
₩	AP1	6,204,431	03-20-2001		

	Digitally signed by Michele Joike		
Examiner VIICHEE JOIKE Signature	DN: cn=michele Joike, c=05, 0=05P10, 00=1636, email=Michele Joike@uspto.gov Date: 2006.05.08 13:23:16 -04'00'	Date Considered	5/8/06

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sub	estitute for form 1449A/B/PT	0		Complete if Known		
				Application Number	10/616,082	
11	IFORMATION	I DI	SCLOSURE	Filing Date	July 8, 2003	
S	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many sh	eets as	s necessary)	Examiner Name	Not yet assigned	
Sheet	2	of	12	Attorney Docket Number	GFI/107 CIP	

MK,T AQ1 6,300,113	10-09-2001	Landry

			FOREI	GN PATENT	DOCUMENTS		
Exam Initials		Cite No.1	Foreign Patent Document Country Code ⁸ - Number ⁴ - Kind Code ⁸ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	τ°
м	K.T	BA**	EP 0 905 232 A1	03-31-1999	Kirin Beer Kabushiki Kaisha		\vdash
		BB**	EP 1 054 062 A1	11-22-2000	Kyowa Hakko Kogyo Co., Ltd.		
		BC**	EP 1 211 310 A	06-05-2002	Kainuma Mam		Г
		BD**	WO 96/21038 A	07-11-1996	Maras Marleen, et al		
		BE**	WO 98/05768	02-12-1998	The Austin Research Institute		П
		BF**	WO 99/31224	06-24-1999	National Research Council of Canada		
		BG**	WO 99/54342	10-28-1999	Umana et al.		П
		BH**	WO 01/14522 A1	03-01-2001	Kirin Brewery et al.		Г
		Bi	WO 01/25406	04-12-2001	University of Victoria Innovation & Development Corp.		
		BJ**	WO 02/00856	01-01-2002	Flanders Interuniversity Institute for Biotechnology		
		BK**	WO 02/00879	01-03-02	Glycofi Inc.		Г
		BL**	WO 03/031464 A	4-17-2003	Chen XI, et al		П
	/	BM**	WO 04/003194 A	01-08-2004	Flanders Interuniversity Inst		
		BN**	JP 8-336387	12-24-1996	Murakami Koji et al.		l

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. "Applicant's unique citation designation number (optional). ³ See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. ¹	include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
MKJ	CA**	Abeijon et al., "Molecular Cloning of the Golgi apparatus uridine diphosphate-N-acetylglucosamine transporter from Kluyveromyces lactis," Proc. Natl. Acad. Sci. USA 93:5963-5968 (1996).				
MKJ	CB**	Adachi et al., "Mus Musculus Adult Male Testis cDNA, Riken full length enriched library, clone: 4931438M07 product: mannosidase 2, alpha 2, full insert sequence" XP002293645, Database accession no. AK029913 Abstract, Database EMBL, December 21, 2002				

Examiner 1	A	Date	6101
		Daw	2018 120
[Signature] \ V \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		[Considered	9010

Under the Paperwork Reduction Act of 1995, no persons are required to re

Su	Substitute for form 1449A/B/PTO			Complete If Known		
				Application Number	10/616,082	
	NFORMATIC	N DIS	CLOSURE	Filing Date	July 8, 2003	
S	TATEMENT	BY AF	PPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many	sheets as ne	ecessary)	Examiner Name	Not yet assigned	
Sheet	3	of	12	Attorney Docket Number	GFI/107 CIP	

	00::	TALL CALL HARAGE LEG CO. Dr. 10 11 12 12 12 12 13 14 14 15 15 15 15 15 15 15 15 15 15 15 15 15	
MKJ	CC**	Alani et al., "A Method for Gene Disruption that Allows Repeated Use of URA3 Selection in the Construction of Multiply Disrupted Yeast Strains," Genetics 116, 541-545, August, 1987.	
	CD**	Altman et al., "Processing of Asparagine-linked Oligosaccharides in Insect Cells: Evidence for Alpha-Mannosidase II," <i>Glycoconj. J</i> 12(2):150-155 (1995).	
	CE**	Altman et al., "Insect cells as hosts for the expression of recombinant glycoproteins," <i>Glycoconj. J.</i> 16(2):109-123 (1999).	
	CF**	Andersen et al., "The Effect of Cell-Culture Conditions on the Oligosaccharide Structures of Secreted Glycoproteins," Curr Opin Biotechnol, 5(5):546-549, October 1994.	
	CG**	Aoki et al., "Expression and activity of chimeric molecules between human UDP-galactose transporter and CMP-sialic acid transporter," <i>J. Biochem.</i> (Tokyo), 126(5):940-50, November, 1999.	
	СН••	Bardor et al., "Analysis of the N-glycosylation of recombinant glycoproteins produced in transgenic plants," <i>Trends in Plant Science</i> 4(9): 376-380 (1999)	
	CI**	Beaudet et al., "High-level expression of mouse Mdr3 P-glycoprotein in yeast Pichia pastoris and characterization of ATPase activity," <i>Methods Enzymol</i> 292: 397-413 (1998)	
·	CJ.	Berka et al., "The Filamentous Fungus Aspergillus-Niger Var Awamori as Host for the Expression and Secretion of Fungal and Non-Fungal Heterologous Proteins," Abstr Papers Amer Chem Soc 203: 121-BIOT (1992)	•
	CK**	Berninsone et al., "The Golgi Guanosine Diphophatase is Required For Transport of GDP-Mannose Into the Lumen of Saccharomyces cerevisiae Golgi Vesicles," J. Biol. Chem., 269(1):207-211, January, 1994.	
	CL**	Berninsone et al., "Regulation of yeast Golgi glycosylation. Guanosine diphosphatase functions as a homodimer in the membrane," <i>J. Biol. Chem</i> 270(24): 14564-14567 (1995).	
	CM**	Berninsone et al., "Functional Expression of the Murine Golgi CMP-Sialic Acid Transporter in Saccharomyces cerevisiae," J. Biol. Chem. 272(19):12616-12619, May, 1997.	
	CN**	Bianchi et al., "Transformation of the yeast <i>Kluyweromyces lactis</i> by new vectors derived from the 1.6 μm circular plasmid pKD1," <i>Current Genetics</i> , 12:185-192, 1987.	
\bigvee	CO"	Boehm et al., "Disruption of the KEX1 Gene in <i>Pichia Pastoris</i> Allows Expression of Full-Length Murine and Human Endostatin," <i>Yeast</i> , 15:563-572 (1999).	

Examiner !	1 . A	Date	
	V ~ . N	Date	~ /@ / \
Signature 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	V (((V (V I I)))	Considered	O(K/I)
		Considered	

PTC/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sul	estitute for form 1449A/B/P	то		Complete if Known		
				Application Number	10/616,082	
11	NFORMATIO	N DI	SCLOSURE	Filing Date	July 8, 2003	
STATEMENT BY APPLICANT				First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many sl	eets a	s necessary)	Examiner Name	Not yet assigned	
Sheet	4	of	12	Attorney Docket Number	GFI/107 CIP	

MKJ		Bonneaud et al., "A family of low and high copy replicative, integrative and single-stranded S. cerevisiae/E. coli shuttle vectors," Yeast 7(6): 609-615 (1991).	
	CQ.	Bretthauer et al., "Glycosylation of Pichia pastoris-derived proteins," Biotechnol Appl Biochem 30(Pt 3): 193-200 (1999).	
	CR**	Bretthauer et al., "Genetic engineering of Pichia pastoris to humanize N-glycosylation of proteins," TRENDS in Biochem, 21(11): 459-462 (2003).	
	CS**	Brockhausen et al., "Control of glycoprotein synthesis. The use of oligosaccharide substrates and HPLC to study the sequential pathway for <i>N</i> -acetylglucosaminyltransferases I, II, III, IV, V and VI in the biosynthesis of highly branched <i>N</i> -glycans by hen oviduct membranes," Biochem. Cell Biol. 66:1134-1151 (1988).	
	СТ"	Callewaert et al., "Use of HDEL-Tagged <i>Trichoderma reesei</i> Mannosyl Oligosaccharide 1,2∀-D-Mannosidase for <i>N</i> -glycan Engineering in <i>Pichia pastoris</i> ," FEBS Letters, 503(2-3):173-8, 2001.	
	Cu	Cereghino et al., "Heterologous protein expression in the methylotrophic yeast <i>Pichia pastoris</i> ," <i>FEMS Microbiology Reviews</i> , 24(1): 45-66 (2000).	
	CV··	Cereghino et al., "New selectable marker/auxotrophic host strain combinations for molecular genetic manipulation of <i>Pichia pastoris</i> ," <i>Gene</i> , 263:159-169 (2001).	
	CW**	Chandrasekaran et al., "Purification and Properties of Alpha-D-Mannose:beta-1,2-N-acetylglucosaminyl-transferases and alpha-D-Mannosidases from Human Adenocarcinoma," Cancer Res., 44(9):4059-68, September, 1984.	
	CX**	Chiba et al., "Production of Human Compatible High Mannose-type (Man₅GlcNAc₂) Sugar Chains in Saccharomyces cerevisiae," J. Biol. Chem., 273(41):26298-26304, October, 1998.	
	CY**	Choi et al., "Use of combinatroial genetic libraries to humanize N-linked glycosylation in the yeast <i>Pichia pastoris</i> ," <i>Proc. Natl. Acad. Sci.</i> USA 100(9):5022-5027, April , 2003.	
	CZ**	Chui et al., "Genetic Remodeling of Protein Glycosylation in vivo Induces Autoimmune Disease," <i>Proc. Natl. Acad. Sci.</i> , USA 98:1142-1147, January, 2001.	
	CA1**	Chui et al., "Alpha-mannosidase-II Deficiency Results in Dyserythropoiesis and Unveils and Alternate Pathway in Oligosaccharide Biosynthesis," <i>Cell</i> , 1997 July 11; 90(1):157-67.	
V	CB1**	Daniel et al, "Mammalian Alpha-Mannosidases—Multiple Forms but a Common Purpose?", Glycobiology, 4, 551-566, October 1994.	

<u> </u>			
[Examiner]	~^	I Data	_ (_
	i) _	Date	$C \setminus C \setminus$
ISignature WARMIN . C.	/ N V + O .	Considered	D(X Y) = 1
Gighter TV CO CO C C		Considered	O'OIOO

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1996, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Suit	estitute for form 1449A/B/PT	o		Complete if Known	
		_		Application Number	10/616,082
11	NFORMATION	I DI	SCLOSURE	Filing Date	July 8, 2003
S	STATEMENT BY APPLICANT			First Named Inventor	Stephen Hamilton
_				Art Unit	1636
	(Use as many sheets as necessary)			Examiner Name	Not yet assigned
Sheet	5	of	12	Attorney Docket Number	GFI/107 CIP

MKJ		Davidson et al., "A PCR-Based Strategy to Generate Integrative Targeting Alleles With Large Regions of Homology," <i>Microbiology</i> , 148 (Pt 8):2607-15).					
	CD1**	Dente, "Human alpha-1-acid glycoprotein genes," <i>Prog. Clin. Biol. Res</i> 300:85-98 (1989).					
	CE1**	Duvet et al., "Cytosolic Deglycosylation Process of Newly Synthesized Glycoproteins Generates Oligomannosides Possessing One GlcNAc Residue at the Reducing End," <i>Biochem J.</i> , 335, 1998, 389-396.					
	CF1** Eades et al., "Characterization of the Class I alpha-Mannosidase Gene Family in the Filamentous Fungus Aspergillus Nidulans," Gene, 2000, S 5; 255(1):25-34.						
	CG1**	Eckhardt et al., "Molecular Cloning of the Hamster CMP-Sialic Acid Transporter," Eur. J. Biochem., 248(1):187-192 (1997).					
	CH1**	Foster et al., "Cloning and Sequence Analysis of Gmll, a Drosophila Melanogaster Homologue of the cDNA Encoding Murine Golgi alpha-Mannosidase II," Gene 154 (1995) 183-186.					
	CI1"	Gleeson, Paul A. "Targeting of Proteins to the Golgi Apparatus," Histochem. Cell Biol., 109:517-532 (1998).					
	CJ1**	Gonzalez, Daniel S et al: "The Alpha-Mannosidases: Phylogeny and Adaptive Diversification" Molecular Biology and Evolution, vol.17, no.2, February 2000, pages 292-300, XP002293609 ISSN: 0737-4038					
	CK1**	Graham et al., "Compartmental Organization of Golgi-specific Protein Modification and Vacuolar Protein Sorting Events Defined in Yeast sec18 (NSF) Mutant," J. Cell. Biol., 114(2): 207-218 (1991).					
	CL1"	Grard et al., "Oligomannosides or Oligosaccharide-lipids as Potential Substrates for Rat Liver Cytosolic ∀-D-Mannosidase," <i>Biochem. J.</i> , 316: 787-792 (1996)					
	CM1**	Guillen et al., "Mammalian Golgi apparatus UDP-N-acetylglucosamine transporter: Molecular Cloning by Phenotypic Correction of a Yeast Mutant," <i>Proc. Natl. Acad. Sci. USA</i> , 95(14):7888-7892 (1998).					
	CN1**	Hamilton et al., "Production of Complex Human Glycoproteins in Yeast," Science 301:1244-1246 (2003).					
	CO1**	Harkki et al., "A Novel Fungal Express System – Secretion of Active Calf Chymosin from the Filamentous Fungus Trichoderma-Reesei," <i>Bio-Tech</i> 7:596-603 (1989).					
\bigvee	CP1**	Harris B.R: "Caenorhabditis Elegans Cosmid F58H1" XP002293610, Protein F58H1.1, Abstract, Databaase EMBL 13 July 1996					

Examiner	Date	^ / .
	Date	L 10101
Isignatura I AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Considered	$\mathcal{D}/\mathcal{V}/\mathcal{U}$
Signature 1	Considered	$O(\lambda/OC)$

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sul	bstitute for form 1449A/E	урто		Complete If Known		
				Application Number	10/616,082	
l Ir	NFORMATIC	DN DI	SCLOSURE	Filing Date	July 8, 2003	
l s	TATEMENT	BY A	APPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many sheets as necessary)			Examiner Name	Not yet assigned	
Sheet	6	of	12	Attorney Docket Number	GFI/107 CIP	

MK		Ichishima et al., "Molecular and Enzymic Properties of Recombinant 1,2-∀-Mannosidase from <i>Aspergillus saitoi</i> Overexpressed in <i>Aspergillus oryzae</i> Cells," 1999; <i>Biochem. J.</i> , 339(Pt 3): 589-597.	
	CR1** Ishida et al., "Molecular Cloning and Functional Expression of the Huma Golgi UDP- <i>N</i> -Acetylglucosamine Transporter," <i>J. Biochem.</i> , 126(1):68-7 (1999).		
	CS1"	Jarvis et al., "Isolation and Characterization of a Class II alphamannosidase cDNA from Lepidopteran Insect Cells," <i>Glycobiology</i> , 1997; 7(1):113-127 (1997).	
	CT1**	Jarvis et al., "Engineering N-glycosylation pathways in the baculovirus-insect cell system," <i>Curr Opin Biotechnol</i> 9(5): 528-33 (1998).	
	CU1"	Kainuma et al., "Coexpression of α1,2 galactosyltransferase and UDP-galactose transporter efficiently galatosylates <i>N</i> - and O-glycan in Saccharomyces cerevisiae," Glycobiology, 9(2): 133-141 (1999).	
	CV1**	Kalsner et al., "Insertion into Aspergillus nidulans of functional UDP-GlcNAc: α3-D-mannoside β-1,2-N-acetylglucosaminyl-transferase I, the enzyme catalysing the first committed step from oligomannose to hybrid and complex N-glycans," <i>Glycoconj. J.</i> , 12(3):360-370 (1995).	
	CW1**	Kawar et al., "Insect Cells Encode a Class II ∀-Mannosidase with Unique Properties," J. Biol. Chem., 276(19):16335-16340 (2001).	·
	CX1**	Khatra et al., "Some kinetic properties of human milk galactosyltransferase," Eur. J. Biochem. 44:537-560 (1974).	
	CY1**	Krezdorn et al., "Human β1,4 galactosyltransferase and α2,6 sialytransferase expressed in Saccharomyces cerevisiae are retained as active enzymes in the endoplasmic reticulum," Eur. J. Biochem., 220(3): 809-17 (1994).	
	CZ1**	Lal et al., "Isolation and Expression of Murine and Rabbit cDNAs Encoding an α1,2-Mannosidase Involved in the Processing of Asparagine-Linked Oligosaccharides," <i>J. Biol. Chem.</i> , 1994. 269(13): 9872-9881.	
	CA2**	Lal et al. "Substrate Specificities of Recombnant Murine Golgi α1,2- Mannosidase IA and IB and Comparison with Endoplasmic Reticulum and Golgi Processing α1,2-Mannosidases," <i>Glycobiology</i> 8(10):981-995, 1998.	
	CB2**	Liao et al., "Cloning, Expression, Purification, and Characterization of the Human Broad Specificity Lysosomal Acid ∀-Mannosidase," <i>J Biol Chem</i> 271(45): 28348-28358.	
	, CC2	Lehle and Tanner, "Membrane-Bound Mannosyl Transferase in Yeast Glycoprotein Biosynthesis," <i>Biochem. Biophys. Acta</i> , 350(1): 225-235, 1974.	

Examiner \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	I Date	C / - / - 1
Signature MM LILL CANUS	Considered	5/8/Db 1
Cignotato 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Considered	0/0/00

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a col

Sub	Substitute for form 1449A/B/PTO			Complete if Known		
		_		Application Number	10/616,082	
11	IFORMATIO	N DI	SCLOSURE	Filing Date	July 8, 2003	
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
(Use as many sheets as necessary)			necessary)	Examiner Name	Not yet assigned	
Sheet	7	of	12	Attorney Docket Number	GFI/107 CIP	

M	Gene of <i>Pichia Stipitis</i> with URA3 and Recovery of the Double Auxotroph, <i>Appl. Microbiol. Biotechnol.</i> , 49 (2): 141-146 (1998).			
		CE2**	Lussier et al., "The KTR and MNNI mannosyltransferase families of Saccharomyces cerevisiae," Biochimica et Biophysica Acta 1426: 323-334 (1999).	
		CF2**	Malissard et al., "Expression of functional soluble forms of human beta-1, 4-galactosyltransferase I, alpha-2-6-sialyltransferase, and alpha-1, 3-fucosyltransferase VI in the methylotrophic yeast Pichia pastoris," <i>Biochem Biophys Res Commun</i> 267(1): 169-173 (2000).	
		CG2**	Maras et al., "In vitro conversion of the carbohydrate moiety of fungal glycoproteins to mammalian-type oligosaccharides," Eur. J. Biochem., 249: 701-707 (1997).	
		CH2**	Maras et al., "Filamentous fungi as production organisms for glycoproteins of bio-medical interest," Glycoconjugate Journal, 16:99-107 (1999)	
		CI2**	Maras et al., "Molecular Cloning and Enzymatic Characterization of a Trichoderma <i>reeisi</i> 1,2-alpha-D-mannosidase," <i>J. Biotechnol.</i> , 77(2-3):255-263, 2000.	
		CJ2**	Martinet et al., "Modification of the protein glycosylation pathway in the methylotrophic yeast <i>Pichia pastoris,</i> " <i>Biotechnology Letters</i> 20(12): 1171-1177 (1998).	
		CK2**	Maruyama et al., "A 1,2-alpha-D-Mannosidase from a Bacillus sp.: Purification, Characterization, and Mode of Action," <i>Carbohydrate Res.</i> 251:89-98 (1994).	
		CL2**	McClure "Modeling the growth, survival and death of microorganisims in foods: the UK food micromodel approach," <i>Int. J. Food Microbiol.</i> , 23(3-4) 265-265 (1994).	
		CM2**	McGarvey et al., "Expression of the rabies virus glycoprotein in transgenic tomatoes," <i>Bio-Technology</i> 13(13): 1484-1487 (1995).	
		CN2**	Merkle et al., "Cloning, Expression, Purification, and Characterixation of the Murine Lysosomal Acid Alpha-Mannosidase," <i>Biochim Biophys Acta</i> , 1336(2): 132-46 (1997).	
		CO2**	Miele et al., "Glycosylation Properties of the <i>Pichia pastoris</i> -Expressed Recombinant Kringle 2 Domain of Tissue-Type Plasminogen Activator," <i>Biotechnol. Appl. Biochem.</i> , 25:151-157 (1997).	
	/	CP2	Moens et al., "Glycoproteins in prokaryotes," Arch. Microbiol. 168(3):169-175	

Examiner		Date	1 - 1 - 1 -
Signatura	Michiel Vo 10 0 0	N	1 6 10 111 1
Signature		U 0 0 , Considered	1 2/1/10/0

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sub	stitute for form 1449A/B/PT	·o		Complete If Known	
				Application Number	10/616,082
11	IFORMATION	I DI	SCLOSURE	Filing Date	July 8, 2003
S	TATEMENT I	3Y /	APPLICANT	First Named Inventor	Stephen Hamilton
				Art Unit	1636
	(Use as many sheets as necessary)			Examiner Name	Not yet assigned
Sheet	8	of	12	Attorney Docket Number	GFI/107 CIP

		CQ2**	Moremen, "Golgi α-mannosidase II deficiency in vertebrate systems:	
l 1	ſΚJ	i	implications for asparagine-linked oligosaccharide processing in	
			mammals," Biochimica Biophysica Acta, 1573: 225-235 (2002).	
Г.		CR2**	Moremen et al., "Biosynthesis and Modification of Golgi Mannosidase II in	
			HeLa and 3T3 Cells, "J. Biol. Chem., 260(11): 6654-6662 (1985).	
		CS2**	Moremen et al., "Topology of Mannosidase II in Rat Liver Golgi	\neg
1 1			Membranes and Release of the Catalytic Domain by Selective Proteolysis,"	
			J. Biol. Chem., 261(23): 10945-10951 (1986).	
		CT2**	Moremen, "Isolation of a Rat Liver Golgi Mannosidase II Clone by Mixed	
			Oligonucleotide-Primed Amplication of cDNA," Proc. Natl. Acad. Sci., USA	
			1989 July;86(14):5276-80.	
		CU2**	Moremen et al., "Isolation, Characterization, and Expression of cDNAs	
			Encoding Murine ∀-Mannosidase II, a Golgi Enzyme that Controls	
1 1			Conversion of High Mannose to Complex N-Glycans," Journal of Cell	
			Biology, 1991 December; 115(6):1521-34.	
		CV2**	Moremen et al., "Glycosidases of the Asparagine-Linked Oligosaccharide	
			Processing Pathway," Glycobiology 4(2): 113-125 (1994).	
		CW2**	Nakanishi-Shindo et al., "Structure of the N-Linked Oligosaccharides That	
			Show the Complete Loss of α-1,6-Polymannose Outer Chain from och1,	
1 1		1	och1 mnn1, and och1 mnn1 alg3 Mutants in Saccharomyces cerevisiae," J.	
			Biol. Chem., 268(35):26338-45 (1993).	
		CX2**	Nakayama et al., "OCHI1 Encodes a Novel Membrane Bound	
1			Mannosyltransferase: Outer Chain Elongation of Asparagine-Linked	
Ш			Oligosaccharides," <i>Embo J.</i> , 11(7):2511-19, 1992.	_[
1 1		CY2··	Nakayama et al. "Substrate Specificity of ∀-1,6-Mannosylatransferase that	
1			Initiates N-Linked Mannose Outer Chain Elongation in Saccharomyces	
Ш			cerevisiae", FEBS Lett., 412(3):547-50, 1997.	_
		CZ2**	Nikawa et al., "Structural and functional conservation of human and yeast	Į
ļ			HCP1 genese which can suppress the growth defect of the	
			Saccharomyces cerevisiae ire15 mutant," Gene 171(1): 107-111 (1996)	
		CA3**	Ogawa et al., "Structure and Transcriptional Regulation of Human alpha-	
			Mannosidase IIX (alpha-mannosidase II isotype) Gene," Eur. J. Biochem.,	ŀ
\square		0000	242(3): 446-453 (1996).	
		CB3**	Oh-eda et al., "Overexpression of the Golgi-Localized Enzyme ∀-	
			mannosidase IIx in Chinese Hamster ovary Cells Results inthe Conversion	ļ
	,		of Hexamannosyl-N-acetylchitobiose to Tetramannosyl-N-acetylchitobiose	j
ΙV	/		in the N-glycan-processing Pathway," Eur. J. Biochem., 268: 1280-1288	
L`		L	(2001).	

Examiner Signature Mullely	ashe)	Date Considered 5/6/05	

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Subs	stitute for form 1449A/B/P	го		Complete If Known		
				Application Number	10/616,082	
IN	FORMATION	N DIS	SCLOSURE	Filing Date	July 8, 2003	
S	TATEMENT	BY A	PPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many sh	eets as	necessary)	Examiner Name	Not yet assigned	
Sheet	9	of	12	Attomey Docket Number	GFI/107 CIP	

MKJ	CC3**	Papac et al., "A high-throughput microscale method to release N-linked oligosaccharides from glycoproteins for matrix-assisted laser desorption/ionization time-of-flight mass spectrometric analysis," <i>Glycobiology</i> 8(5): 445-454 (1998).					
	CD3**	Perez et al., "Transport of Sugar Nucleotides into the Lumen of Vesicles Derived from Rat Liver Rough Endoplasmic Reticulum and Golgi Apparatus," Methods in Enzymology, 138: 709-715 (1987).					
	CE3**	Puglielli et al., "Reconstitution, Identification, and Purification of the Rat Liver Golgi Membrane GDP-fucose Transporter," <i>J. Biol. Chem.</i> 274(50): 35596-35600 (1999).					
	CF3**	Rabouille et al., "The <i>Drosophila GMII</i> Gene Enclodes Golgi α-mannosidase II," <i>J. Cell Sci.</i> , 1999 October;112(Pt 19): 3319-30.					
	CG3"	Raju et al., "Analysis of glycoconjugates," <i>Anal Biochem.</i> 283(2): 123-124 (2000).					
	CH3**	Ren et al., "Purification and Properties of a Golgi-Derived (alpha 1,2)-mannosidase-I from Baculovirus-infected Lepidopteran Insect Cells (IPLB-SF21AE) with Preferential Activity Toward Mannose6-N-Acetylglucosamine2," <i>Biochem.</i> , 34(8): 2489-2495.					
	C13**	Roberts, D.B.: "Drosophila Melanogaster GMII gene, exons 1-5" XP002293614, Database accession no. AJ132715, Abstract, Database EMBL					
	CJ3**	Romero et al., "Ktr1P is an ∀-1,2-mannosyltransferase of Saccharomyces cerevisiae," Biochem. J., 321 (Pt 2): 289-295 (1997).					
	CK3**	Romero et al., "Mutation of Arg ²⁷³ to Leu Alters the Specificity of the Yeast N-Glycan Processing Class I ∀1,2-Mannosidase," <i>J. Biol. Chem</i> , 275(15):11071-11074 (2000).					
	CL3**	Ruther et al., "c-fos expression interferes with thymus development in transgenic mice," Cell 53(6): 847-856 (1988).					
	СМ3**	Schachter et al., "The 'Yellow Brick Road' to Branched Complex N-glycans," Glycobiology 1(5): 453-461, 1991.					
	CN3**	Sato et al., "Arabidopsis Thaliana DNA Chromosome 5, BAC clone F2G14 (Essa project)", XP002293613, Database accession no AL391146, gene "F2G14_70" encoding "alpha-mannosidase-like protein" of protein_id="CACO1814.1" Abstract, Database EMBL 7 August 2000					
	CO3**	Satou and SatoH: "Ciona Intestinalis cDNA, clone: cieg014e11, full insert sequence." XP002293611, Database accession no. AK116684, the whole document, Database EMBL					
V	CP3**	Schneikert et al., "Characterization of a Novem Mouse Recombinant Processing alpha-mannosidase," <i>Glycobiology</i> , 4(4):445-450 (1994).					

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid CMB control number.

Sut	estitute for form 1449A/B/PT	0		Complete If Known		
				Application Number	10/616,082	
11	NFORMATION	I DI	SCLOSURE	Filing Date	July 8, 2003	
l s	TATEMENT B	3Y /	APPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many she	eets as	necessary)	Examiner Name	Not yet assigned	
Sheet	10	of	12	Attorney Docket Number	GFI/107 CIP	

M	КJ	CQ3**	Schwientek et al., "Golgi Localization in Yeast is Mediated by the Membrane Anchor Region in Rat Liver Sialyltransferase," <i>J. Biol. Chem.</i> , 270(10):5483-5489 (1995).
		CR3**	Segawa et al., "Schizosaccharomyces pombe UDP-galatose transporter: identification of its functional form through cDNA cloning and expression in mammalian cells," FEBS Letters, 451(3): 295-298 (1999).
		CS3**	Shinn et al: "Arabidopsis Thaliana AT5g14950/F2G14_70 mRNA, complete cds." XP002293612, Database accession no. AY052707, Abstract, Database EMBL
		CT3**	Sikorski et al., "A system of shuttle vectors and yeast host strains designed for efficient manipulation of DNA in <i>Saccharomyces cerevisiae</i> ," <i>Genetics</i> 122(1): 19-27 (1989).
		CU3**	Soderholm et al. "Vector for pop-in/pop-out Gene Replacement in <i>Pichia pastoris</i> ," <i>Biotchniques</i> , 31 (2):306-10 (2001).
		CV3**	Sommers et al., "Transport of Sugar Nucleotides into Rat Liver Golgi," J. Cell Biol., 91(2): A406-A406 (1981).
		CW3**	Sommers et al., "Transport of Sugar Nucleotides into Rat Liver Golgi. A New Golgi Marker Activity," <i>J Biolog Chem</i> , 257(18): 10811-10817 (1982).
		CX3**	Staub et al., "High-yield production of a human therapeutic protein in tobacco chloroplasts," <i>Nature Biotechnology</i> 18(3): 333-338 (2000).
		CY3**	Stix, "Supercharging Protein Manufacture," Scientific Amer., Jan. 2004: 32-33.
		CZ1**	Svetina et al., "Expression of Catalytic Subunit of Bovine Enterokinase in the Filamentous Fungus Aspergillus Niger," <i>J. Biotechnol.</i> , 76(2-3): 245-251 (200).
		CA4**	Swiss Prot P11655.
		CB4**	Swiss Prot P32906
		CC4**	Swiss Prot P39107
\vdash		CD4**	Swiss Prot P50108
$oxed{oxed}$		CE4**	Swiss Prot P53008
		CF4**	Takeuchi, "Trial for molecular breeding of yeast for the production of glycoprotein therapeutics," <i>Trends in Glycoscience and Glycotechnology</i> 9:S29-S35 (1997).
		CG4**	Umaña et al., "Engineered Glycoforms of an Antineuroblastoma IgG1 with Optimized Antibody-Dependent Cellular Cytotoxic Activity," <i>Nature Biotechnology</i> , 17(1):176-80 (1999).
	/	CH4**	Ware et al., "Expression of Human Platelet Glycoprotein lb-Alpha in Transgenic Mice," <i>Thrombosis and Haemostasis</i> 69(6): 1194-1194 (1993).

Examiner Signature	Mehele	Kanlio,	Date Considered	5/8/06
•		80000		-

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0551-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a co

Sut	stitute for form 1449A/B/	PTO		Complete If Known		
	300000000000000000000000000000000000000			Application Number	10/616,082	
II.	NFORMATIC	N DI	SCLOSURE	Filing Date	July 8, 2003	
S	TATEMENT	BY /	APPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many	sheets as	necessary)	Examiner Name	Not yet assigned	
Sheet	11	of	12	Attorney Docket Number	GFI/107 CIP	

Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994	Calla da Manimina						
CJ4** Werner et al., "Appropriate Mammalian Expression Biopharmaceuticals," Arzneimittelforschung, 1998, A Wiggins et al., "Activity of the yeast MNN1 alpha-1, requires a notif conserved in many other families of Proc. Nat. Acad. Sci. USA 95(14): 7945-7950 (1998). CL4** Yamashita et al., "An α-Mannosidase purified from specific for α1,2 linkages," Biochemical and Biophys Communications 96(3): 1335-1342. CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of Plasmodium falciparum protein 1 expressed in mammalian cells," Glycobiolo 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", Biotechnol Bioeng., Yip et al., "Cloning and analysis of the Saccharomyc and MNN1 genes required for complex glycosylation Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994). CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1(Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001). CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of racetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080. CU4** Genbank Accession No. AK116684. CV4** Genbank Accession No. D55649.							
Biopharmaceuticals," Arzneimittelforschung, 1998, A CK4** Wiggins et al., "Activity of the yeast MNN1 alpha-1,3 requires a notif conserved in many other families of Proc. Nat. Acad. Sci. USA 95(14): 7945-7950 (1998) CL4** Yamashita et al., "An α-Mannosidase purified from specific for α1,2 linkages," Biochemical and Biophys Communications 96(3): 1335-1342. CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of Plasmodium falciparum protein 1 expressed in mammalian cells," Glycobiolo 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", Biotechnol Bioeng., and MNN1 genes required for complex glycosylation Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1(Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Per molecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of ra acetylglucosaminyltransferase I in Saccharomyces of Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
 CK4** Wiggins et al., "Activity of the yeast MNN1 alpha-1,3 requires a notif conserved in many other families of <i>Proc. Nat. Acad. Sci. USA</i> 95(14): 7945-7950 (1998) CL4** Yamashita et al., "An α-Mannosidase purified from specific for α1,2 linkages," <i>Biochemical and Biophys Communications</i> 96(3): 1335-1342. CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of <i>Plasmodium falciparun</i> protein 1 expressed in mammalian cells," <i>Glycobiolo</i> 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", <i>Biotechnol Bioeng.</i>, CO4** Yip et al., "Cloning and analysis of the <i>Saccharomyo</i> and MNN1 genes required for complex glycosylation <i>Proc. Natl. Acad. Sci. USA</i>, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "<i>Schizosaccharomyces Pombe Och1</i>(Mannosyltranferase that is involved in Outer Chain Oligosaccharides," <i>FEBS Lett.</i>, 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of raacetylglucosamine: α-3-D-mannoside β-1,2-<i>N</i>-acetylglucosaminyltransferase I in <i>Saccharomyces Glycobiology</i>, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649 							
requires a notif conserved in many other families of <i>Proc. Nat. Acad. Sci. USA</i> 95(14): 7945-7950 (1998) CL4** Yamashita et al., "An α-Mannosidase purified from specific for α1,2 linkages," <i>Biochemical and Biophys Communications</i> 96(3): 1335-1342. CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of <i>Plasmodium falciparum</i> protein 1 expressed in mammalian cells," <i>Glycobiolo</i> 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", <i>Biotechnol Bioeng.</i> , CO4** Yip et al., "Cloning and analysis of the <i>Saccharomya</i> and MNN1 genes required for complex glycosylation <i>Proc. Natl. Acad. Sci. USA</i> , 91(7): 2723-2727 (1994) CP4** Yoko-o et al., " <i>Schizosaccharomyces Pombe Och1</i> (Mannosyltranferase that is involved in Outer Chain Oligosaccharides," <i>FEBS Lett.</i> , 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of raacetylglucosaminyltransferase I in <i>Saccharomyces Glycobiology</i> , 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
CL4** Yamashita et al., "An α-Mannosidase purified from specific for α1,2 linkages," <i>Biochemical and Biophys Communications</i> 96(3): 1335-1342. CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of <i>Plasmodium falciparum</i> protein 1 expressed in mammalian cells," <i>Glycobiolo</i> 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", <i>Biotechnol Bioeng.</i> , and MNN1 genes required for complex glycosylation <i>Proc. Natl. Acad. Sci. USA</i> , 91(7): 2723-2727 (1994) CP4** Yoko-o et al., " <i>Schizosaccharomyces Pombe Och1</i> (Mannosyltranferase that is involved in Outer Chain Oligosaccharides," <i>FEBS Lett.</i> , 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzymes (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of racetylglucosamine: α-3-D-mannoside β-1,2- <i>N</i> -acetylglucosaminyltransferase I in <i>Saccharomyces Glycobiology</i> , 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. D55649	glycosyltransfereases,"						
specific for α1,2 linkages," Biochemical and Biophys Communications 96(3): 1335-1342. CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of Plasmodium falciparum protein 1 expressed in mammalian cells," Glycobiolo 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", Biotechnol Bioeng., and MNN1 genes required for complex glycosylation Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1 (Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzymes (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of racetylglucosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces (Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
 CM4** Yang et al., "Glycosylation and proteolytic processin recombinant polypeptides of <i>Plasmodium falciparum</i> protein 1 expressed in mammalian cells," <i>Glycobiolo</i> 1347-55. CN4** Yang et al., "Effects of Ammonia on CHO Cell Grow Production, and Glycosylation", <i>Biotechnol Bioeng.</i>, and MNN1 genes required for complex glycosylation <i>Proc. Natl. Acad. Sci. USA</i>, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "<i>Schizosaccharomyces Pombe Och1</i> (Mannosyltranferase that is involved in Outer Chain Oligosaccharides," <i>FEBS Lett.</i>, 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzymes (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of racetylglucosamines: α-3-D-mannoside β-1,2-<i>N</i>-acetylglucosaminyltransferase I in <i>Saccharomyces Glycobiology</i>, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649 							
Production, and Glycosylation", Biotechnol Bioeng., CO4** Yip et al., "Cloning and analysis of the Saccharomyc and MNN1 genes required for complex glycosylation Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1(Mannosyltranferase that is involved in Outer Chain I Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Per molecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of ra acetylglucosamine: α-3-D-mannoside β-1,2-N- acetylglucosaminyltransferase I in Saccharomyces of Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	merozoite surface						
and MNN1 genes required for complex glycosylation Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1(Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzymes (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of rasectylglucosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
and MNN1 genes required for complex glycosylation Proc. Natl. Acad. Sci. USA, 91(7): 2723-2727 (1994) CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1(Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzymes (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of rasectylglucosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
CP4** Yoko-o et al., "Schizosaccharomyces Pombe Och1(Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001) CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Per molecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of ra acetylgluocosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CT4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	and MNN1 genes required for complex glycosylation of secreted proteins,"						
Mannosyltranferase that is involved in Outer Chain Oligosaccharides," FEBS Lett., 489(1): 75-80 (2001 CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Permolecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of raacetylglucosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
CQ4** Yoshida et al., "1-2-alpha-D- mannosidase from Per molecular and enzymic properties of two isoenzyme (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of ra acetylglucosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF106080 CT4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	Elongation of N-Linked						
molecular and enzymic properties of two isoenzymes (Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of rasectylglucosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
(Pt2): 349-354 (1993). CR4** Yoshida et al., "Expression and charaterization of ra acetylgluocosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
CR4** Yoshida et al., "Expression and charaterization of ra acetylgluocosamine: α-3-D-mannoside β-1,2-N-acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	,						
acetylgluocosamine: α-3-D-mannoside β-1,2-N- acetylglucosaminyltransferase I in Saccharomyces Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	t UDP-N-						
acetylglucosaminyltransferase I in Saccharomyces (Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
Glycobiology, 9 (1): 53-58 (1999). CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	cerevisiae,"						
CS4** Genbank Accession No. AF005034 CT4** Genbank Accession No. AF106080 CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649	•						
CU4** Genbank Accession No. AK116684 CV4** Genbank Accession No. D55649							
CV4** Genbank Accession No. D55649							
CW4** Genbank Accession No. NM 073594							
CX4** Genbank Accession No. NM 121499							
CY4** Genbank Accession No. U31520							
\ / CZ4** Genbank Accession No. X77652							
V CA5** Genbank Accession No. XM 218816							

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a col

Subs	titute for form 1449A/B	/PTO		Complete If Known		
-				Application Number	10/616,082	
IN	FORMATIC	ON DIS	SCLOSURE	Filing Date	July 8, 2003	
l si	TATEMENT	BY A	APPLICANT	First Named Inventor	Stephen Hamilton	
				Art Unit	1636	
	(Use as many sheets as necessary)			Examiner Name	Not yet assigned	
Sheet	12	of	12	Attorney Docket Number	GFI/107 CIP	

MKJ	CB5**	Genbank Accession No. NM 002406	
1	CC5**	Genbank Accession No. CAA98114	.
	CD5**	Genbank Accession No. NM_088548 (Genbank AN 6678787)	
	CE5**	Genbank Accession No. NM006715	
1	CF5··	Genbank Accession No. X77652	
1	CG5**	Genbank Accession No. X61172	
V	CH5**	Genbank Accession No. NM_000528	

Examiner 1	, , <u>, , , , , , , , , , , , , , , , , </u>	Date	- ,
	\	Juano 1	1 1012
ISignature I VVI (IX)		Considered	$\neg (x/)/a$
() () () () () () () ()		Considered	